Manitoba-Hydro is proposing construction of a 500-kilovolt (kV) alternating current (AC) transmission line from the Dorsey Converter Station to the international border between Manitoba and Minnesota. Known as the Manitoba–Minnesota Transmission Project, this line is needed to export surplus electricity and enhance the reliability of the province’s electricity supply in emergency and drought situations.

The project also includes associated upgrades to stations at Dorsey, Riel and Glenboro. The anticipated in-service date for the project is 2020.

What is it?

The project is expected to begin construction in 2019 and be in-service in 2020. The transmission line will carry an initial 2,000 megawatts (MW) of power, which can be increased to 4,000 MW.

Where is it?

The Manitoba-Minnesota Transmission Project will originate at the Dorsey Converter Station, located near Rosser, northwest of Winnipeg, and travel south around Winnipeg. From southeast Winnipeg, the transmission line will continue south crossing the Manitoba-Minnesota border south of Piney, Manitoba. It will then connect to the Great Northern Transmission Line, which will be constructed by Minnesota Power.

The Great Northern Transmission Line will terminate at the Iron Range Station located northwest of Duluth, Minnesota.

What’s new?

Preferred route

Based on feedback received through public engagement and environmental assessment processes, a preferred route has been determined. This preferred route aims to minimize impact on people and the environment.

The project also includes associated upgrades to stations at Dorsey, Riel and Glenboro. The anticipated in-service date for the project is 2020.

We would like to hear from you.

Please contact: Licensing & Environmental Assessment

- Phone (toll-free) 1-877-343-1631;
  (in Winnipeg) 204-360-7888;
- email: mmtp@hydro.mb.ca;
- Visit www.hydro.mb.ca/mmtp for up-to-date information on the Manitoba-Minnesota Transmission Project, to complete an online survey or register for Project updates.

For more information regarding the route selection or environmental assessment processes, please speak with a Manitoba Hydro representative or visit www.hydro.mb.ca/mmtp and click on "Environmental Assessment and Route Selection".
What will the line look like?
The Manitoba-Minnesota Transmission Project will use steel lattice towers. A self-supporting tower design will be used in cultivated agricultural areas and a guyed structure design (see below illustration) will be used in most other terrain.

The project will include:
- towers typically ranging from 40 to 60 metres (m) (130 to 200 feet (ft.)) in height;
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- a right-of-way width of 80 m (260 ft.) for self-supporting towers and 100 m (330 ft.) for guyed structures.

![500-kV Guyed Suspension Steel Tower](image1)
![500-kV Self-Supporting Lattice Steel Tower](image2)

What are the goals of the engagement process?
During the route selection and environmental assessment processes, Manitoba Hydro seeks input from local landowners, First Nations, Metis, local municipalities, stakeholder groups, government departments and the general public. Opportunities for participation include open houses, meetings and Manitoba Hydro’s website.

The public engagement goals for the Manitoba–Minnesota Transmission Project are to:
- share project information;
- obtain feedback for use in the route selection and environmental assessment process;
- gather and understand local interests and concerns;
- integrate interests and concerns into the routing and assessment processes;
- review potential mitigation measures.

Manitoba Hydro will meet these goals by:
- involving the public throughout the route selection and environmental assessment processes;
- providing clear, timely and relevant information and responses;
- delivering a public engagement process that is adaptive and inclusive;
- informing the public of how their feedback influenced the project;
- documenting and reporting on feedback received.

Preferred route determination
Manitoba Hydro is using a process based on the EPRI-GTC (Electric Power Research Institute – Georgia Transmission Corporation) Transmission Line Siting Methodology. This process aims to balance various perspectives on the landscape and to determine a preferred route for the project.

**Round 1**
- Feedback on alternative segments provided throughout Round 1, and develop additional route segments for consideration
- 700,000-plus routing options
- Alternative route evaluation
- Top routes to border crossings compared
- Final comparison of routes to determine strengths and weaknesses
- Border crossing negotiation based on feedback through route comparison

**Round 2**
- Border crossing and refined alternative routes determined
- Compile feedback from engagement and environmental assessment processes
- Develop additional route segments for consideration
- 500,000-plus routing options
- Alternative route evaluation
- Final comparison with top five routes
- Modifications to mitigate outstanding concerns

**Round 3**
- Preferred route determined

Public engagement process
The public engagement process aims to collect feedback throughout the route determination and environmental assessment processes. The feedback received is important in the assessment work being undertaken and in determining the final placement of the transmission line.

Rounds 1 and 2 provided various ways in which the public, First Nations, Metis and stakeholder groups could participate and provide feedback. Open houses, meetings, workshops, a project email address and a toll-free information line gathered various perspectives and comments regarding the project.

Round 3 will focus on the following:
- Assisting in finalizing the preferred route;
- Outlining the contents of the EIS, including what is being assessed;
- Discussing mitigation measures to minimize potential impacts;
- Informing the public of the regulatory review process;
- Answering questions and addressing concerns.

First Nation and Metis engagement
Manitoba Hydro is working with First Nation and Metis to provide information about the project and share ideas on how to mitigate concerns brought forward. The engagement process is adaptive and uses various methods to meet the information needs of the participants including community open houses, community information sessions, Elders gatherings, leadership meetings and routing workshops.

First Nations and Metis who indicated an interest in the Project have been invited to submit proposals to undertake self-directed traditional knowledge studies. Manitoba Hydro aims to help communities better understand current and historical land use of the area, and identify sensitive sites that may have historical, cultural, or sacred value.
## What we heard - Round 2

Manitoba Hydro has gathered feedback on the project through public open houses, workshops and meetings as well as phone calls, emails and letters.

### Comment/Concern

The most frequent comments or concerns heard throughout Round 2 are presented below:

<table>
<thead>
<tr>
<th>Comment/Concern</th>
<th>How the comments/concerns were addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proximity to individual residences and farmsteads</strong></td>
<td>Proximity is a consideration in transmission line routing and Manitoba Hydro will avoid residences to the greatest extent possible.</td>
</tr>
<tr>
<td><strong>Environmental degradation and reduced opportunities for hunting, trapping, and gathering of berries and medicinal plants as well as potential impacts to culturally significant areas</strong></td>
<td>The environmental assessment and public engagement processes identify potential sensitivities. Manitoba Hydro will identify sensitive sites and will consider specific mitigation or construction scheduling to minimize potential effects.</td>
</tr>
<tr>
<td><strong>Perceived health effects due to electric and magnetic fields (EMF)</strong></td>
<td>Manitoba Hydro will design and maintain exposure levels from the transmission lines to those below guidelines set forth by the International Commission on Non-Ionizing Radiation Protection. These guidelines have been adopted by the World Health Organization and Health Canada.</td>
</tr>
<tr>
<td><strong>ATV access and hunting in wilderness areas and private lands</strong></td>
<td>Manitoba Hydro will work with local authorities to manage access along rights-of-way once a final route is selected and will work with landowners who wish to implement measures to limit access to the right-of-way.</td>
</tr>
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<td><strong>The value of private property in close proximity to a transmission line could decrease</strong></td>
<td>The environmental assessment will assess potential for impact on property value. Current research suggests that property values will not be impacted by the presence of the transmission line.</td>
</tr>
<tr>
<td><strong>Future and approved subdivision plans for private property</strong></td>
<td>Through the routing and public engagement processes, Manitoba Hydro aims to capture the locations of these subdivisions so they can be considered in decision making. Smaller subdivided lots are avoided where possible.</td>
</tr>
<tr>
<td><strong>Compensation for private landowners</strong></td>
<td>Manitoba Hydro provides a one-time compensation payment for transmission line easements as well as a one-time tower payment related to loss of annual production. Manitoba Hydro also compensates landowners for any damages related to construction and operation.</td>
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<tr>
<td><strong>Potential impacts on land available for future Treaty Land Entitlement (TLE) selections</strong></td>
<td>Manitoba Hydro encourages communities to share information about potential future TLE selections. This information will be considered in the route selection and environmental assessment processes.</td>
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</table>

To date, we have received over 2,000 comments regarding the Manitoba–Minnesota Transmission Project via meetings, open house, email and phone calls. We will continue to gather feedback, which will be documented in the environmental impact statement and then submitted to regulators in the summer of 2015.

## Environmental assessment processes

An environmental impact statement (EIS) will be developed for the project and submitted for regulatory review and approval. The EIS will outline the project’s potential impacts and provide mitigation measures to minimize potential impact to people and the environment.

The EIS for the Manitoba–Minnesota Transmission Project will include:
- documentation of engagement activities;
- characterization of the environment;
- identification and analysis of potential effects on people and the environment;
- mitigation measures to avoid or reduce potential adverse effects.

For more information visit [www.hydro.mb.ca/mmtp](http://www.hydro.mb.ca/mmtp) and click on “Environmental Assessment and Route Selection”.

## Engagement and Project timelines

### Round 1
- Alternative routes and proposed border crossings: October to March 2014.

### Round 2
- Refined alternative routes and preferred border crossing – March 2014 to December 2014.

### Round 3
- Preferred route: January to May 2015.

## Regulatory review process

The Manitoba–Minnesota Transmission Project will require a Class 3 Licence under The Environment Act (Manitoba) and federal authorization through the National Energy Board (NEB). The environmental impact statement (EIS) will be completed to meet federal requirements by the NEB and under The Canadian Environmental Assessment Act, 2012.

Review of the EIS will also be undertaken by various branches of both provincial and federal government as outlined below:

### Provincial
- [Manitoba Conservation and Water Stewardship (MCWS)](http://www.gov.mb.ca/mcws/): This project is an international power line and will require authorization from the NEB. The NEB will include a public comment period.

### Federal
- [National Energy Board (NEB)](http://www.neb-one.gc.ca/): This project is an international power line and will require authorization from the NEB.

For more information, visit [www.hydro.mb.ca/mmtp](http://www.hydro.mb.ca/mmtp) and click on “Regulatory”.

## Anticipated next steps

- **Environmental Impact Statement (EIS) filing:** summer 2015.
- **Regulatory review process:** summer 2015 to 2016.
- **Licence decision:** 2017.
- **Construction:** 2018 to 2020.
- **In-service date:** 2020.
What we heard - Round 2
Manitoba Hydro has gathered feedback on the project through public open houses, workshops and meetings as well as phone calls, emails and letters. The most frequent comments or concerns heard throughout Round 2 are presented below:

Comment/Concern | How the comments/concerns were addressed
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For more information visit www.hydro.mb.ca/mmtpp and click on “Environmental Assessment and Route Selection”.

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Provincial
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Engagement and Project timelines

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To date, we have received over 2,000 comments regarding the Manitoba–Minnesota Transmission Project via meetings, open house, email and phone calls. We will continue to gather feedback, which will be documented in the environmental impact statement and then submitted to regulators in the summer of 2015.
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Preliminary tower design

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Round 3
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Manitoba-Minnesota Transmission Project

Round 3 – Preferred Route

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The Great Northern Transmission Line will terminate at the Iron Range Station located northwest of Duluth, Minnesota.

What’s new?
Based on feedback received through public engagement and environmental assessment processes, a preferred route has been determined. This preferred route aims to minimize impact on people and the environment.

Manitoba Hydro is presenting this preferred route to the public to gather feedback to help finalize the route and to complete an environmental assessment to present to regulators in summer of 2015. Public feedback will assist in:

- informing discipline specialists undertaking their assessments;
- determining the final placement of the transmission line;
- determining mitigation measures to minimize the potential impacts on people and the environment.

For more information regarding the route selection or environmental assessment processes, please speak with a Manitoba Hydro representative or visit www.hydro.mb.ca/mmtp and click on “Environmental Assessment and Route Selection”.

Round 3 - Preferred Route

What’s next?
Information and feedback gathered during this round will be compiled and considered to develop a final preferred route and assist in the environmental assessment activities being undertaken.

Following the determination of the final preferred route and the development of the environmental impact statement (EIS), Manitoba Hydro will submit the EIS for regulatory approval from both provincial and federal agencies. The regulatory review process also includes public comment periods where members of the public can become involved in the review of the EIS.

We will continue to:

- inform the public regarding the project, timelines and the regulatory review process;
- utilize a variety of mechanisms to receive and share information with interested individuals;
- conduct field surveys and complete an assessment on the local environment to assist in the final placement of the transmission line;
- discuss the mitigation measures to minimize impact on people and the environment.

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